

FIXTURE FOR CLAMPING A GAS TURBINE COMPONENT BLANK AND ITS USE IN SHAPING THE GAS TURBINE COMPONENT BLANK

ABSTRACT OF THE DISCLOSURE

A gas turbine component blank is shaped by clamping the gas turbine component blank into a fixture that accurately positions the gas turbine component blank in three dimensions. The positioning is accomplished against stops accurately machined into a base of the fixture, by first supporting the gas turbine component blank on one set of stops that prevents movement in the direction perpendicular to a plane of the base, and then operating a movable clamp to force the gas turbine component blank against other sets of stops that limit the movement of the gas turbine component blank in directions lying in the base plane. The clamp has a compound movement that simultaneously forces the gas turbine component blank against stops that prevent movement in orthogonal directions lying in the base plane. The gas turbine component blank is thereafter shaped, preferably by grinding the sides of the root precursor of the gas turbine component blank.